

IN THE CLAIMS:

1. (Previously Presented) An electroluminescence display device comprising:
a substrate;
a plurality of pixels over the substrate, each of the plurality of pixels comprising:
a first thin film transistor;
a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and
an electroluminescence element electrically connected to the second thin film transistor,
wherein the first thin film transistor comprises at least two channel regions in an active layer, at least two gate electrodes corresponding to the channel regions, over the active layer with a gate insulating film interposed therebetween, and an impurity region interposed between the channel regions.
2. (Previously Presented) An electroluminescence display device comprising:
a substrate; and
a plurality of pixels over the substrate, each of the plurality of pixels comprising:
a first thin film transistor;
a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and
an electroluminescence element electrically connected to the second thin film transistor,
wherein the first thin film transistor comprises at least two channel regions in an active layer, at least two gate electrodes corresponding to the channel regions, over the active layer with a gate insulating film interposed therebetween, and an impurity region interposed between the channel regions, and
wherein a channel width of the second thin film transistor is greater than a channel width of the first thin film transistor.
3. (Previously Presented) An electroluminescence display device comprising:
a substrate; and

a plurality of pixels over the substrate, each of the plurality of pixels comprising:
a first thin film transistor;
a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and
an electroluminescence element electrically connected to the second thin film transistor,
wherein at least the first thin film transistor comprises an active layer in which two or more channel regions connected in series are formed, and
wherein an equation of $W2/L2 \geq 5 \times W1/L1$ establishes where a channel length of the second thin film transistor is $L2$, a channel width of the second thin film transistor is $W2$, a channel length of the first thin film transistor is $L1$ and a channel width of the first thin film transistor is $W1$.

4. (Currently Amended) An electroluminescence display device according to claim 3, wherein the channel length of the second thin film transistor ($L2$) is 0.1 to 50 ~~mm~~ μm , the channel width of the second thin film transistor ($W2$) is 0.5 to 30 ~~mm~~ μm , the channel length of the first thin film transistor ($L1$) is 0.2 to 18 ~~mm~~ μm and the channel width of the first thin film transistor ($W1$) is 0.1 to 5 ~~mm~~ μm .

5. (Previously Presented) An electroluminescence display device according to claim 1, wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

6. (Previously Presented) An electroluminescence display device according to claim 2, wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

7. (Previously Presented) An electroluminescence display device according to claim 3, wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

8. (Currently Amended) An electroluminescence display device according to claim 1, wherein each of the first and second thin film transistors has at least one lightly doped impurity region between a channel region and one of ~~source or~~ a drain region or the impurity regions where the lightly doped impurity region of the first thin film transistor does not overlap a gate electrode of the first thin film transistor and the lightly doped impurity region of the second thin film transistor overlaps a gate electrode of the second thin film transistor at least partly.

9. (Currently Amended) An electroluminescence display device according to claim 2, wherein each of the ~~switching element and current control element~~ first and second thin film transistors has at least one lightly doped impurity region between a channel region and one of ~~source~~ a drain region or the impurity regions wherein the lightly doped impurity region of the ~~switching element~~ first thin film transistor does not overlap a gate electrode of the ~~switching element~~ first thin film transistor and the lightly doped impurity region of the ~~current control element~~ second thin film transistor overlaps a gate electrode of the ~~current control element~~ second thin film transistor at least partly.

10. (Currently Amended) An electroluminescence display device according to claim 3, wherein each of the ~~switching element and the current control element~~ first and second thin film transistors has at least one lightly doped impurity region ~~between a channel region and one of source or impurity regions where,~~ wherein the lightly doped impurity region of the ~~switching element~~ first thin film transistor does not overlap a gate electrode of the ~~switching element~~ first thin film transistor, and the lightly doped impurity region of the ~~current control element~~ second thin film transistor overlaps a gate electrode of the ~~current control element~~ second thin film transistor at least partly.

11.-16. (Canceled)

17. (Previously Presented) An electroluminescence display device comprising:
a substrate; and
a plurality of pixels over the substrate, each of the plurality of pixels comprising:

a first thin film transistor;
a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and
an electroluminescence element electrically connected to the second thin film transistor,
wherein the first thin film transistor comprises at least two gate electrodes over the substrate, at least two channel regions corresponding to the gate electrode, over the gate electrode with a gate insulating film interposed therebetween, and an impurity region interposed between the channel regions, and
wherein the impurity region has the same impurity concentration as a source or drain regions of the first thin film transistor.

18. (Previously Presented) An electroluminescence display device according to claim 17, a channel width of the second thin film transistor is greater than a channel width of the first thin film transistor.

19. (Currently Amended) An electroluminescence display device according to claim 17, wherein each of the first and second thin film transistors has at least one lightly doped impurity region between a channel region and one of ~~source or~~ a drain region or the impurity regions where the lightly doped impurity region of the first thin film transistor does not overlap a gate electrode of the first thin film transistor and the lightly doped impurity region of the second thin film transistor overlaps a gate electrode of the second thin film transistor at least partly.

20. (Previously Presented) An electroluminescence display device according to claim 17, wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

21. (Previously Presented) An electroluminescence display device according to claim 17, wherein an equation of $W2/L2 \geq 5 \times W1/L1$ establishes where a channel length of the second thin film transistor is $L2$, a channel width of the second thin film transistor is $W2$, a channel

length of the first thin film transistor is L1 and a channel width of the first thin film transistor is W1.

22. (Currently Amended) An electroluminescence display device according to claim 21, wherein the channel length of the second thin film transistor (L2) is 0.1 to 50 ~~mm~~ μm, the channel width of the second thin film transistor (W2) is 0.5 to 30 ~~mm~~ μm, the channel length of the first thin film transistor (L1) is 0.2 to 18 ~~mm~~ μm and the channel width of the first thin film transistor (W1) is 0.1 to 5 ~~mm~~ μm.

23. (Previously Presented) An electroluminescence display device according to claim 17, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

24. (Canceled)

25. (Previously Presented) An electroluminescence display device comprising:
a substrate; and
a plurality of pixels over the substrate, each of the plurality of pixels comprising:
a first thin film transistor;
a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and
an electroluminescence element electrically connected to the second thin film transistor,
wherein the first thin film transistor comprises at least two gate electrodes over the substrate, at least two channel regions corresponding to the gate electrode, over the gate electrode with a gate insulating film interposed therebetween, and an impurity region interposed between the channel regions,
wherein a channel width of the second thin film transistor is greater than a channel width of the first thin film transistor, and
wherein the impurity region has the same impurity concentration as a source or drain regions of the first thin film transistor.

26. (Previously Presented) An electroluminescence display device according to claim 25, wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

27. (Previously Presented) An electroluminescence display device according to claim 25, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

28. (Canceled)

29. (Currently Amended) An electroluminescence display device comprising:
a substrate; and
a plurality of pixels over the substrate, each of the plurality of pixels comprising:
a first thin film transistor;
a second thin film transistor comprising a gate electrode electrically connected to the first thin film transistor; and
an electroluminescence element electrically connected to the second thin film transistor,
wherein the first thin film transistor comprises an active layer in which at least two channel regions connected in series are formed with an impurity region interposed therebetween, and
wherein each of the first and second thin film transistors has at least one lightly doped impurity region between a channel region and one of ~~source or~~ a drain region or the impurity regions where the lightly doped impurity region of the first thin film transistor does not overlap a gate electrode of the first thin film transistor and the lightly doped impurity region of the second thin film transistor overlaps a gate electrode of the second thin film transistor at least partly.

30. (Previously Presented) An electroluminescence display device according to claim 29, wherein the first thin film transistor is a switching thin film transistor and the second thin film transistor is a current control thin film transistor.

31. (Previously Presented) An electroluminescence display device according to claim 29, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

32. (Canceled)

33. (Previously Presented) An electroluminescence display device comprising:
a substrate; and
a plurality of pixels over the substrate, each of the plurality of pixels comprising:
a switching element comprising an active layer and at least first and second gate electrodes adjacent to the active layer with a gate insulating film interposed therebetween;
a current control element comprising a gate electrode electrically connected to the switching element; and
an electroluminescence element electrically connected to the current control element.

34. (Previously Presented) An electroluminescence display device according to claim 33, a channel width of the current control element is greater than a channel width of the switching element.

35. (Currently Amended) An electroluminescence display device according to claim 33, wherein each of the switching element and current control element has at least one lightly doped impurity region ~~between a channel region and one of source or impurity regions where,~~ wherein the lightly doped impurity region of the switching element does not overlap a gate electrode of the switching element and the lightly doped impurity region of the current control element overlaps a gate electrode of the current control element at least partly.

36. (Previously Presented) An electroluminescence display device according to claim 33, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

37. (Canceled)

38. (Previously Presented) An electroluminescence display device comprising:
a substrate; and
a plurality of pixels over the substrate, each of the plurality of pixels comprising:
a switching element comprising an active layer and at least first and second gate electrodes adjacent to the active layer with a gate insulating film interposed therebetween;
a current control element comprising a gate electrode electrically connected to the switching element; and
an electroluminescence element electrically connected to the current control element, wherein a channel width of the current control element is greater than a channel width of the switching element.

39. (Previously Presented) An electroluminescence display device according to claim 38, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

40. (Canceled)

41. (Currently Amended) An electroluminescence display device comprising:
a substrate; and
a plurality of pixels over the substrate, each of the plurality of pixels comprising:
a switching element comprising an active layer and at least first and second gate electrodes adjacent to ~~an~~ the active layer with a gate insulating film interposed therebetween;
a current control element comprising a gate electrode electrically connected to the switching element; and

an electroluminescence element electrically connected to the current control element,
wherein each of the switching element and the current control element has at least one lightly doped impurity region ~~between a channel region and one of source or impurity regions~~ where, wherein the lightly doped impurity region of the switching element does not overlap a gate electrode of the switching element and the lightly doped impurity region of the current control element overlaps a gate electrode of the current control element at least partly.

42. (Previously Presented) An electroluminescence display device according to claim 41, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

43. (Canceled)

44. (Previously Presented) An electroluminescence display device comprising:
a substrate; and
a plurality of pixels over the substrate, each of the plurality of pixels comprising:
a switching element comprising at least two thin film transistors;
a current control element comprising a gate electrode electrically connected to the switching element; and
an electroluminescence element electrically connected to the current control element.

45. (Previously Presented) An electroluminescence display device according to claim 44, a channel width of the current control element is greater than a channel width of the switching element.

46. (Currently Amended) An electroluminescence display device according to claim 44, wherein each of the switching element and the current control element has at least one lightly doped impurity region ~~between a channel region and one of source or impurity regions~~ where, wherein the lightly doped impurity region of the switching element does not overlap a gate electrode of the switching element and the lightly doped impurity region of the current control element overlaps a gate electrode of the current control element at least partly.

47. (Previously Presented) An electroluminescence display device according to claim 44, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

48. (Canceled)

49. (Previously Presented) An electroluminescence display device comprising:
a substrate; and
a plurality of pixels over the substrate, each of the plurality of pixels comprising:
a switching element comprising at least two thin film transistors;
a current control element comprising a gate electrode electrically connected to the switching element; and
an electroluminescence element electrically connected to the current control element,
wherein a channel width of the current control element is greater than a channel width of the switching element.

50. An electroluminescence display device according to claim 49, wherein the substrate comprises a material selected from the group consisting of a glass, a glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

51. (Canceled)

52. (Currently Amended) An electroluminescence display device comprising:
a substrate; and
a plurality of pixels over the substrate, each of the plurality of pixels comprising:
a switching element comprising at least two thin film transistors;
a current control element comprising a gate electrode electrically connected to the switching element; and
an electroluminescence element electrically connected to the current control element,
wherein each of the switching element and the current control element has at least one

lightly doped impurity region ~~between a channel region and one of source or impurity regions~~
~~where,~~ wherein the lightly doped impurity region of the switching element does not overlap a
gate electrode of the switching element and the lightly doped impurity region of the current
control element overlaps a gate electrode of the current control element at least partly.

53. (Previously Presented) An electroluminescence display device according to claim 52,
wherein the substrate comprises a material selected from the group consisting of a glass, a
glass ceramic, a quartz, a silicon, a ceramic, a metal, and a plastic.

54. (Canceled)